

CLAIMS

1. A system for color measurement for a color hard copy apparatus,
having a print media transport path, comprising:
- 5 an illumination source adjacent to said path;
a plurality of photodetectors adjacent to said path; and
a test pattern on a sheet of media traveling said path, the pattern
having a geometric configuration such that each of said photodetectors
detects substantially discrete regions of said pattern having a single color
10 generated by said apparatus.
2. The system as set forth in claim 1, further comprising:
said photodetectors having predetermined spectral responses.
- 15 3. The system as set forth in claim 1 wherein the illumination source is
broadband.
4. The system as set forth in claim 1, further comprising:
a white calibration target mounted within the field of view of all of said
20 sensors.
5. A color hard copy apparatus, having a mechanism generating a test
pattern on media transported along a predetermined path through said
apparatus, comprising:

adjacent said path downstream of the mechanism, a broad band illumination source mounted for illuminating said pattern; and

adjacent said path downstream of the mechanism, an array of sensors mounted for detecting color properties of discrete areas of a region of the test pattern having an intended uniform color generated by the mechanism.

6. The apparatus as set forth in claim 5, comprising:
said sensors having predetermined spectral responses.

7. The apparatus as set forth in claim 5 wherein the illumination source is broadband.

8. The apparatus as set forth in claim 5, further comprising:
a white calibration target mounted within the field of view of all of said sensors.

9. A method for measuring actual color produced by a color hard copy device comprising the steps of:

- a) illuminating with broad band light, a region of a color test pattern generated by the device, wherein said region has a first color generated by the device;
- b) discretely sensing actual color characteristics of individual areas of said region; and
- c) storing data representative of said color characteristics.

10. The method as set forth in claim 9, comprising the further steps of:
printing a plurality of intended colors in addition to said first color with
said device, and

5 repeating steps a)-c) for each of the plurality of intended colors other
than said first color.

11. The method as set forth in claim 9, comprising the further step of:
prior to steps a) - c), calibrating each of said sensors using a white

10 calibration target.